

Data Dictionary -- Model Attributes

Input Name	Name	Module	Type	Default	Cell Ref	Worksheet
Intermediate	wc_tci_E262			fotinst * wc_tci_d262	E262	
Intermediate	wc_tci_E263			pigs * wc_tci_d263	E263	
Intermediate	wc_tci_E264			panel * wc_tci_d264	E264	
Intermediate	wc_tci_E265			efi * efiu	E265	
Intermediate	wc_tci_E266			wc_tci_e262 + wc_tci_e263 + wc_tci_e264 + wc_tci_e265	E266	
Intermediate	wc_tci_C270			feedfrac	C270	
Intermediate	wc_tci_C271			latadist	C271	
Intermediate	wc_tci_C273			Fix(wc_tci_c271 / regensp)	C273	
Intermediate	wc_tci_C275			wc_tci_c273 * regeninv	C275	
Intermediate	wc_tci_C284			(trench + tubes * condft + resurf) * telfrac * (1 - wc_tci_c270)	C284	
Intermediate	wc_tci_D276			5280 * wc_tci_c271	D276	
Intermediate	wc_tci_D277			wc_tci_d276	D277	
Intermediate	wc_tci_D279			wc_tci_d276 / splicesp	D279	
Intermediate	wc_tci_D284			wc_tci_d276	D284	
Intermediate	wc_tci_E276			fibinv * wc_tci_d276	E276	
Intermediate	wc_tci_E277			fibplace * wc_tci_d277	E277	
Intermediate	wc_tci_E279			wc_tci_d279 * splice * termfib	E279	
Intermediate	wc_tci_E284			wc_tci_c284 * wc_tci_d284	E284	
Intermediate	wc_tci_C288			-1 * Int(-1 * (wc_tci_d284 / manhsp))	C288	
Intermediate	wc_tci_E287			manhinv * wc_tci_c288	E287	
Intermediate	wc_tci_E289			wc_tci_e284 + wc_tci_e287	E289	
Intermediate	wc_tci_C291			burinst * telfrac	C291	
Intermediate	wc_tci_D291			wc_tci_d276	D291	
Intermediate	wc_tci_E291			wc_tci_d291 * wc_tci_c291	E291	
Intermediate	wc_tci_C294			poleinv * telfrac * (1 - wc_tci_c270 / 2) / polesp	C294	
Intermediate	wc_tci_D294			-1 * Int(-1 * (wc_tci_d276 / polesp))	D294	
Intermediate	wc_tci_E294			wc_tci_c294 * wc_tci_d294	E294	
Intermediate	wc_tci_C296			ugfrac	C296	
Intermediate	wc_tci_C297			burfrac	C297	
Intermediate	wc_tci_C298			airfrac	C298	
Intermediate	i_u/g_cs_pDS			(wc_tci_c275 + wc_tci_e276 + wc_tci_e277 + wc_tci_e279 + wc_tci_e289) / wc_tci_c271 / (fotcap * fotfill * 672)		
Intermediate	i_br_cs_pDS			(wc_tci_c275 + wc_tci_e276 + wc_tci_e277 + wc_tci_e279 + wc_tci_e291) / wc_tci_c271 / (fotcap * fotfill * 672)		

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Input Name	Name	Module	Type	Default	Cell Ref	Worksheet
Intermediate	i_ar_cs_pDS			(wc_tci_c275 + wc_tci_e276 + wc_tci_e277 + wc_tci_e279 + wc_tci_e294) / wc_tci_c271 / (fotcap * fotfill * 672)		
Intermediate				wc_tci_e289 / wc_tci_c271 / (fotcap * fotfill * 672)	E300	
Intermediate				wc_tci_e294 / wc_tci_c271 / (fotcap * fotfill * 672)	E302	
Intermediate	i_tm_cs_pDS			wc_tci_e266 / (fotcap * fotfill * 672)		
Intermediate	i_wm_cs_pDS			i_u/g_cs_pDS * wc_tci_c296 + i_br_cs_pDS * wc_tci_c297 + i_ar_cs_pDS * wc_tci_c298		
Intermediate	i_tm_wm_pDS			i_tm_cs_pDS + wc_tci_c271 * i_wm_cs_pDS		
Intermediate	i_wm_pds			wc_tci_e300 * wc_tci_c296 + wc_tci_e302 * wc_tci_c298		
Intermediate	wc_tci_E306			i_tm_wm_pDS / wc_tci_c271	E306	
Intermediate	wc_tci_D321			200.00%	D321	
Intermediate	wc_tci_D322			2 * termfib	D322	
Intermediate	wc_tci_D323			200.00%	D323	
Intermediate	wc_tci_E321			fotinst * wc_tci_d321	E321	
Intermediate	wc_tci_E322			pigs * wc_tci_d322	E322	
Intermediate	wc_tci_E323			panel * wc_tci_d323	E323	
Intermediate	wc_tci_E324			efi * efiu	E324	
Intermediate	wc_tci_E325			wc_tci_e321 + wc_tci_e322 + wc_tci_e323 + wc_tci_e324	E325	
Intermediate	wc_tci_C329			feedfrac	C329	
Intermediate	wc_tci_C330			accessdist	C330	
Intermediate	wc_tci_C332			Fix(wc_tci_c330 / regensp)	C332	
Intermediate	wc_tci_C334			wc_tci_c332 * regeninv	C334	
Intermediate	wc_tci_D335			5280 * wc_tci_c330	D335	
Intermediate	wc_tci_D336			wc_tci_d335	D336	
Intermediate	wc_tci_E335			fibinv * wc_tci_d335	E335	
Intermediate	wc_tci_E336			fibplace * wc_tci_d336	E336	
Intermediate	wc_tci_D338			wc_tci_d335 / splicesp	D338	
Intermediate	wc_tci_E338			wc_tci_d338 * splice * termfib	E338	
Intermediate	wc_tci_D343			wc_tci_d335	D343	
Intermediate	wc_tci_C343			(trench + tubes * condft + resurf) * telfrac * (1 - wc_tci_c329)	C343	
Intermediate	wc_tci_E343			wc_tci_c343 * wc_tci_d343	E343	
Intermediate	wc_tci_C347			-1 * Int(-1 * (wc_tci_d343 / manhsp))	C347	
Intermediate	wc_tci_E346			wc_tci_c347 * manhin	E346	
Intermediate	wc_tci_E348			wc_tci_e343 + wc_tci_e346	E348	
Intermediate	wc_tci_C350			burinst * telfrac	C350	

Data Dictionary -- Model Attributes

Input Name	Name	Module	Type	Default	Cell Ref	Worksheet
Intermediate	wc_tci_D350			wc_tci_d355	D350	
Intermediate	wc_tci_E350			wc_tci_c350 * wc_tci_d350	E350	
Intermediate	wc_tci_C353			poleinv * telfrac * (1 - wc_tci_c329 / 2) / polesp	C353	
Intermediate	wc_tci_D353			-1 * Int(-1 * (wc_tci_d335 / polesp))	D353	
Intermediate	wc_tci_E353			wc_tci_c353 * wc_tci_d353	E353	
Intermediate	wc_tci_C355			ugfrac	C355	
Intermediate	wc_tci_C356			burfrac	C356	
Intermediate	wc_tci_C357			airfrac	C357	
Intermediate	a_u/g_cs_pDS			(wc_tci_c334 + wc_tci_e335 + wc_tci_e336 + wc_tci_e338 + wc_tci_e348) / wc_tci_c330 / (fotcap * fotfill * 672)		
Intermediate	a_br_cs_pDS			(wc_tci_c334 + wc_tci_e335 + wc_tci_e336 + wc_tci_e338 + wc_tci_e350) / wc_tci_c330 / (fotcap * fotfill * 672)		
Intermediate	a_ar_cs_pDS			(wc_tci_c334 + wc_tci_e335 + wc_tci_e336 + wc_tci_e338 + wc_tci_e353) / wc_tci_c330 / (fotcap * fotfill * 672)		
Intermediate	wc_tci_E359			wc_tci_e348 / wc_tci_c330 / (fotcap * fotfill * 672)	E359	
Intermediate	wc_tci_E361			wc_tci_e353 / wc_tci_c330 / (fotcap * fotfill * 672)	E361	
Intermediate	a_tm_cs_pDS			wc_tci_e325 / (fotcap * fotfill * 672)		
Intermediate	a_wm_cs_pDS			a_u/g_cs_pDS * wc_tci_c355 + a_br_cs_pDS * wc_tci_c356 + a_ar_cs_pDS * wc_tci_c357		
Intermediate	a_tm_wm_pDS			a_tm_cs_pDS + wc_tci_c330 * a_wm_cs_pDS		
Intermediate	a_wm_pds			wc_tci_e359 * wc_tci_c355 + wc_tci_e361 * wc_tci_c357		
Intermediate	wc_tci_E365			a_tm_wm_pDS / wc_tci_c330	E365	
total tandem-routed interoffice CCS	tdm_rt_io_CCS		348802.4204	res_line_sa * (res_off_tdm + res_intra_tdm + res_inter_tdm) + bus_line_sa * (bus_off_tdm + bus_intra_tdm + bus_inter_tdm)	D8	Tandem and STP Inv
total wire center investment	wc_inv	WireCenter	3696000	tdm_sa * (Const5 * Room5 + PF3) * Wccomm	D14	Tandem and STP Inv
per-line wire center investment	wc_inv_pl	WireCenter	2.561859622	wc_inv / (bus_line_sa + res_line_sa + pa_line_sa)	D15	Tandem and STP Inv
STP investment calculations						
total STP pairs in service area	STP_sa	WireCenter	2	t_STP	D18	Tandem and STP Inv

Data Dictionary -- Model Attributes

Input Name	Name	Module	Type	Default	Cell Ref	Worksheet
total operator traffic, CCS	oper_CCS	WireCenter	121735.08	bus_line_sa * bus_OS + res_line_sa * res_OS	H8	Tandem and STP Inv
number of operator tandems	oper_tdm	WireCenter	1	-Int(-oper_CCS / tandBHCA)	H7	Tandem and STP Inv
total STP investment	STP_inv	WireCenter	3185722.222	recordset3.STP_sa * (recordset3.STPcomm + v_rec_temp1.totallinks * (recordset3.STPInv - recordset3.STPcomm) / (2 * recordset3.STPcap * recordset3.STP_sa)) + (recordset3.tdm_sa + recordset3.oper_tdm + recordset3.STP_sa * 4) * recordset3.LinkTerm	D20	Tandem and STP Inv
total STP wire center investment	STP_wc_inv	WireCenter	480000	STP_sa * (Const3 * Room3 + PF3)	D21	Tandem and STP Inv
total investment per line	inv_pl	WireCenter	2.540872767	(STP_inv + STP_wc_inv) / (lcbus + lcpub + lcres)	D22	Tandem and STP Inv
excess STP capacity, links	excess_STP_cap	WireCenter	2458	recordset3.STP_sa * recordset3.STPcap * 2 - v_rec_temp1.totallinks	D23	Tandem and STP Inv
total links	total_links	WireCenter	430	v_rec_temp1.totallinks + 4 * recordset3.STP_sa	D24	Tandem and STP Inv
Total tandem-routed BHCA						
business	bus_tdm_BHCA	WireCenter	78021.98009	bus_line_sa * (bus_off_tdm + bus_intra_tdm + bus_inter_tdm) / bus_hold * 100	D27	Tandem and STP Inv
residential	res_tdm_BHCA	WireCenter	76906.82738	res_line_sa * (res_off_tdm + res_intra_tdm + res_inter_tdm) / res_hold * 100	D28	Tandem and STP Inv
Excess tandem real time capacity, BHCA	ex_tdm_rt_BHCA	WireCenter	7945071.193	tdm_sa * tandBHCA * tandmaxocc - bus_tdm_BHCA - res_tdm_BHCA	D30	Tandem and STP Inv
Excess tandem trunk capacity, trunks	ex_tdm_trnk_cap	WireCenter	563316.2756	tdm_sa * portlimit * maxtrunkfill - recordset3.tdm_rt_io_ccs / recordset3.trunkccs	D31	Tandem and STP Inv Tandem and STP Inv
Excess tandem switches, real-time basis	ex_tdm_sw_rt	WireCenter	4.767042716	ex_tdm_rt_BHCA / tandBHCA * tandmaxocc	D33	Tandem and STP Inv
Excess tandem switches, trunk basis	ex_tdm_sw_trnk	WireCenter	3.755441837	ex_tdm_trnk_cap / portlimit * maxtrunkfill	D34	Tandem and STP Inv
total common equipment investment	cmn_eq_inv	WireCenter	3183418.622	tdm_sa * (tandcominv + (tandintercept - 1) * tandcominv / tdm_sa * minimum(ex_tdm_sw_rt, ex_tdm_sw_trnk))	D12	Tandem and STP Inv
per-line switch common equipment investment	pl_swch_cmn_eq	WireCenter	2.239703763	cmn_eq_inv / (lcres + lcbus)	D13	Tandem and STP Inv

Data Dictionary -- Model Attributes

Input Name	Name	Module	Type	Default	Cell Ref	Worksheet
Signaling link calculations						
total tdm/STP distance	tot_tdm_pSTP	WireCenter	791.8343261	t_tandem_pSTP	D46	Tandem and STP Inv
tandem A link total investment	tdm_A_inv	WireCenter	8648.292639	tot_tdm_pSTP * t_wm_cs_pds + t_tm_cs_pds * 2 * (tdm_sa + oper_tdm)	D39	Tandem and STP Inv
C link total investment	C_inv	WireCenter	20162.23493	4 * LinkCross * (t_STP_pSTP * t_wm_cs_pds + t_tm_cs_pds)	D40	Tandem and STP Inv
total tdm A link inv/switched line	tdm_A_psl	WireCenter	0.005994511	tdm_A_inv / (bus_line_sa + res_line_sa + pa_line_sa)	D42	Tandem and STP Inv
total C link inv/switched line	C_psl	WireCenter	0.013975329	C_inv / (bus_line_sa + res_line_sa + pa_line_sa)	D43	Tandem and STP Inv
avg tdm/STP distance	avg_tdm_pSTP	WireCenter	131.9723877	tot_tdm_pSTP / tot_tdm	D47	Tandem and STP Inv
avg D link investment, per link	avg_D_pl	WireCenter	1436.59542	2 * t_tm_cs_pds + avg_tdm_pSTP * t_wm_cs_pds	D48	Tandem and STP Inv
total operator positions	tot_oper_pos	WireCenter	450.8706667	oper_CCS / (opccs * opint)	H11	Tandem and STP Inv
total OS tdm common equipment	t_OS_tdm_cmn	WireCenter	1000000	oper_tdm * tandcominv	H13	Tandem and STP Inv
total OS tdm, per line	t_OS_tdm_pl	WireCenter	0.693143837	t_OS_tdm_cmn / (bus_line_sa + res_line_sa + pa_line_sa)	H15	Tandem and STP Inv
operator position remote fac. inv.	op_pos_rm_inv	WireCenter	6474.556448	(opdist * t_wm_cs_pds + t_tm_cs_pds) * tot_oper_pos	H16	Tandem and STP Inv
total operator position investment	t_op_pos_inv	WireCenter	1584521.89	tot_oper_pos * opinv + op_pos_rm_inv	H17	Tandem and STP Inv
total operator pos. investment/line	t_op_pos_pl	WireCenter	1.098301583	t_op_pos_inv / (bus_line_sa + res_line_sa + pa_line_sa)	H19	Tandem and STP Inv
total OS tdm wire center	t_OS_tdm_wc	WireCenter	2000000	oper_tdm * (Const5 * Room5 + PF5)	H22	Tandem and STP Inv
total OS tdm wire center, per line	t_OS_tdm_wc_pl	WireCenter	1.386287674	t_OS_tdm_wc / (bus_line_sa + res_line_sa + pa_line_sa)	H24	Tandem and STP Inv

Data Dictionary -- Model Attributes

Input Name	Name	Module	Type	Default	Cell Ref	Worksheet
Expense Module Inputs						
NID investment per line	ro_C42	Convergence		NIDinv		
terminal and splice investment per line	ro_C43	Convergence		SpliceInv		
average lines/business location	ro_C44	Convergence		BusLineLoc		
local DEMs, thousands	ro_C45	Convergence		DEMSlocal		
intrastate DEMs, thousands	ro_C46	Convergence		DEMSintra		
interstate DEMs, thousands	ro_C47	Convergence		DEMSinter		
total DEMs, thousands	ro_C48	Convergence		ro_C42 + ro_C43 + ro_C44		
intraLATA tandem fraction	ro_C49	Convergence		tandLATA		
interLATA tandem fraction	ro_C50	Convergence		tandAccess		
interoffice traffic fraction	ro_C51	Convergence		InterFrac		
total dedicated access trunks	ro_C52	Convergence		sum(drt_rt_ac_trnk)		
total dedicated transport trunks	ro_C53	Convergence		ro_C52 + tci_C43 * sum(t_lcl_trnk) + sum(LATA_drt_trnk) + sum(OS_trnk)		
total common trunks	ro_C54	Convergence		sum(LATA_tdm_trnk) + sum(swch_ac_trnk) + sum(t_lcl_trnk) * (1 - tci_C43)		
state	ro_C55	Convergence		bk_state		
company	ro_C56	Convergence		bk_company		
fraction direct-routed local traffic	ro_C57	Convergence		Int_Ofc_Fr		
max trunk usage, CCS	ro_C58	Convergence		TrunkCCS		
average trunk utilization	ro_C59	Convergence		TrunkFrac		
local interoffice traffic fraction	ro_C60	Convergence		Int_Ofc_Fr		
local DEM fraction	ro_C61	Convergence		DEM_Fr		
ISUP msgs/interoffice call	ro_C62	Convergence		Isupmsgs		
ISUP msg length	ro_C63	Convergence		isuplen		
TCAP msgs/transaction	ro_C64	Convergence		tcapmsgs		
TCAP msg length	ro_C65	Convergence		tcaplen		
fraction of calls requiring TCAP	ro_C66	Convergence		tcapfrac		
average local direct route distance	ro_C67	Convergence		Miles		
average intraLATA direct route distance	ro_C68	Convergence		LATAdist		
average direct access route distance	ro_C69	Convergence		Accessdist		
total signaling links	ro_C70	Convergence		total_links		
drop investment per line	ro_C71	Convergence		dropinv		
local call attempts	ro_F45	Convergence		tci_F66		

Data Dictionary -- Model Attributes

Input Name	Name	Module	Type	Default	Cell Ref	Worksheet
call completion factor	ro_F46	Convergence		tci_F67		
intraLATA calls completed	ro_F47	Convergence		tci_F68		
interLATA intrastate calls comp	ro_F48	Convergence		tci_F69		
interLATA interstate calls comp	ro_F49	Convergence		tci_F70		
fraction interoffice str shared w/fdr	ro_F50	Convergence		tci_C153		
trunk port investment, per port	ro_F51	Convergence		tci_C47		
signaling port investment, per end	ro_F52	Convergence		tci_F43/2		
avg D link investment, per link	ro_F53	Convergence		avg_D_pl		
business holding time multiplier	ro_F54	Convergence		tci_F20		
res holding time multiplier	ro_F55	Convergence		tci_F19		
bus/res local DEMs	ro_F56	Convergence		tci_K78		
bus/res state DEMs	ro_F57	Convergence		tci_K79		
bus/res interstate DEMs	ro_F58	Convergence		tci_K80		
total shared feeder/io structure	ro_F59	Convergence		sum(sp1)		
i/o aerial structure fract of total	ro_F60	Convergence		tci_C181/(tci_C179 + tci_C181)		

2.2 Census Block Group Level Data

This data includes input values stored in the database related to each CBG that cannot be changed by the user. Each CBG variable will have a value for each individual CBG. (e.g., While each variable in Model Attributes has one value per state, each variable in the CBG Level Data has a value for each CBG within each state). The CBG Level Data also includes derived calculations which use both the CBG input variables and the Model Attributes. The CBG level data is used by the Line Module, the Data Module, the Loop Module and the Convergence Module.

Data Dictionary -- CBG

Field Name	Variable Name	Formula	Business Description	Query Name
cli	cli	Input		-
company	company	Input		-
census blk grp	cbg	Input	Census Block Group	-
Quadrant	quad	Input	Quadrant	-
Omega	omega	Input	Omega	-
Alpha	alpha	Input	Alpha	-
Cntrd dist ft	c_dist	Input		-
tothh	tothh	Input	Total Household	-
area-sq mi	area	Input	Area	-
density-tothh/sqmi	d_tothh	Input	Household per Square Mile	-
Rock Depth	r_depth	Input	Rock Depth	-
Rock Hrdns	r_hard	Input	Rock Hardness	-
Surf Tex	tex	Input	Surface Texture	-
Wtr Tbl Dpth	tbl_depth	Input		-
business employees	bus_emp	Input	Business Employees	-
density-line/sqmi	d_line	t_line / area	density-line/sqmi	
total lines	t_line	bus_line + res_line + sa_line + pub_line	total lines	
business lines	bus_line	bus_emp * #LCBUS / &total_emp_state	business lines	
residential lines	res_line	tothh * #LCRes / &total_hh_state	residential lines	
special access	sa_line	bus_emp * #LCSA / &total_emp_state	special access	
public lines	pub_line	bus_emp * #LCPub / &total_emp_state	public lines	
B	b_dis	c_dist * cos(pi/180 * alpha)	B Distance	
A	a_dis	c_dist * sin(pi/180 * alpha)	A Distance	
Surf Tex Indicator	tex_ind	lookup(tex, @texturetable)	Surface Texture Indicator	
Ttl Fdr Distnc	feeder_dis	IF(a_dis > (0.5 * D), b_dis + a_dis - (0.5 * D), b_dis)		
"A" Portn Fdr temp	feeder_A_tmp	feeder_dis - b_dis		
"A" Portn Fdr	feeder_A	IF(feeder_A_tmp = 0, 0, IF(OR(r_depth < 12, tex_ind = 1), 1.2 * (feeder_A_tmp + 0.25 * D), feeder_A_tmp + 0.25 * D))		
Distr Distnc	distr_dis	IF(OR(r_depth < 12, tex_ind = 1), 0.75 * D, 0.0625 * D)		
area-sq mi	area_sq	area	Duplicate	
D	D	SQRT(area) * 5280		
Urban	urban	IF(d_line > 850, 'Y', 'N')		
Copper Depth Condition	copp_dep	IF(AND(r_depth <= #UGDepth, r_hard="HARD"), 1, IF(AND(r_depth > #UGDepth, tex_ind=0), 3, 2))		
Fiber Depth Condition	fib_dep	IF(AND(r_depth <= #FiberDepth, r_hard="HARD"), 1, IF(AND(r_depth > #FiberDepth, tex_ind=0), 3, 2))		
Dist Ca Multplr	distr_mult	Not Used		
Fdr Ca Multplr	fdr_mult	Not Used		
Fiber Multplr	fib_mult	Not Used		
BG sqnc #	BG_sqnc	Compare B and Assign 1,2,3... to BG_sqnc in ascending order	Not done in SQL	
Sgmt Dist	sgmt_dis	IF(BG_sqnc = 1, b_dis, b_dis - b_dis[BG_sqnc - 1])		
Sgmt Type 1	sgmt_t1	IF((b_dis + feeder_A) < #Digfiberfeeddist, "cable", IF(AND((b_dis + feeder_A) > #Digfiberfeeddist, density < 5), "AFC", "SLC"))		
Type 1 HH	type1_HH	t_line		

Data Dictionary -- CBG

Field Name	Variable Name	Formula	Business Description	Query Name
Sgmt Type 2	sgmt_t2	IF(OR(BG_sgmt = max(BG_sgmt)), AND(sgmt_t1 = sgmt_t1[BG_sqnc + 1], sgmt_t2[BG_sqnc + 1] = ""), "", if(not(sgmt_t1 = sgmt_t1[BG_sqnc + 1]), sgmt_t1[BG_sqnc + 1], sgmt_t2[BG_sqnc + 1]))	max(BG_sqnc) within the same WC and the same quadrant	
Sgmt Type 3	sgmt_t3	IF(OR(BG_sgmt = max(BG_sqnc)), AND(sgmt_t2 = sgmt_t2[BG_sqnc + 1], sgmt_t3[BG_sqnc + 1] = ""), "", if(not(sgmt_t2 = sgmt_t2[BG_sqnc + 1]), sgmt_t2[BG_sqnc + 1], sgmt_t3[BG_sqnc + 1]))		
HH on Cpr	cop_HH	IF(sgmt_t1="Cable",IF(OR(BG_sqnc = max(BG_sqnc)), AND(NOT(BG_sqnc = max(BG_sqnc)), NOT(sgmt_t1 = sqnc_t1(+ 1)), NOT(sgmt_t2="Cable"), NOT(sgmt_t3="Cable")), (cop_HH(+ 1) = 0, type1_HH, type1_HH+ cop_HH(+ 1)), IF(OR(sgmt_t2="Cable", sgmt_t3="Cable"), cop_HH(+ 1),0))		
HH on SLC	SLC_HH	IF(sgmt_t1="SLC", IF(OR(BG_sgmt = max(BG_sgmt), AND(NOT(BG_sgmt = max(BG_sgmt)), NOT(sgmt_t1 = sgmt_t1(+ 1)), NOT(sgmt_t2="SLC"), NOT(sgmt_t3="SLC")), (SLC_HH(+1) = 0), type1_HH, type1_HH+SLC_HH(+1)), IF(OR(sgmt_t2="SLC", sgmt_t3="SLC"), SLC_HH(+1),0))		
#fibers for SLC	SLC_Fib	IF(SLC_HH=0, 0, IF(BG_sqnc=max(BG_sqnc), #SLCfiberremote, IF(SLC_HH=SLC_HH(+1), SLC_fib(+1), SLC_fib(+1)+#SLCfiberremote)))		
HH on AFC	AFC_HH	IF(sgmt_t1="AFC", IF(OR(BG_sgmt = max(BG_sgmt), AND(NOT(BG_sgmt = max(BG_sgmt)), NOT(sgmt_t1 = sgmt_t1(+ 1)), NOT(sgmt_t2="AFC"), NOT(sgmt_t3="AFC")), (AFC_HH(+1) = 0), type1_HH, type1_HH+AFC_HH(+1)), IF(OR(sgmt_t2="AFC", sgmt_t3="AFC"), AFC_HH(+1),0))		
# AFC fbrs this BG	AFC_fib_bg	IF(OR(AFC_HH=0,NOT(sgmt_t1="AFC")),0, ((CEILING(type1_HH/(#AFCds0fiber*#AFC_ele_fill),1))* #AFCfiberremote)		
TTL # AFC fibers	tot_AFC_fib	IF(AFC_HH=0,0,(CEILING(AFC_HH/(#SLCds0fiber*#AFC_ele_fill),1))*AFCfiberremote)	??	
BG% AFC Fbrs	bg_p_AFC	IF(tot_AFC_fib = 0, 0, AFC_fib_bg/tot_AFC_fib)	No Referenece to this Var again	
CA strtr %	CA_str_p	IF(NOT(sgmt_t1="Cable"),0, IF(sgmt_t2="", 1, IF(sgmt_t3="",0.9,0.8)))	No Referenece to this Var again	
SLC Strtr %	SLC_str_p	IF(sgmt_t1="SLC",IF(sgmt_t2="",1,0.5),IF(OR(sgmt_t2="SLC",sgmt_t3="SLC"),0.1,0))	No Referenece to this Var again	
AFS Strtr %	AFC_str_p	1 - SLC_str_p - CA_str_p	No Referenece to this Var again	
Copper Multiplr		Not Used		
Fiber Multiplr		Not Used		
Distr Multiplr		Not Used		

Data Dictionary -- CBG

Field Name	Variable Name	Formula	Business Description	Query Name
Cpr Fdr Prs	cpr_fdr_prs	cop_HH/LOOKUP(density in #feeder0-#2550,2)		
Cpr Fdr Size	cpr_fdr_sz	IF(NOT(cpr_fdr_prs=0),lookup(cpr_fdr_prs-(#max_cop_fed*max_sz_ca) in @feeder_Cable_size)		
+# Max Size Ca	max_sz_ca	TRUNC(IF(cpr_fdr_prs>#max_cop_fed, cpr_fdr_prs/#max_cop_fed,0))		
"A" Fdr Prs	A_fdr_prs	IF(sgmt_t1="Cable", type1_HH/VLOOKUP(density,#feeder0-#2550,2),0)		
"A" Fdr Size	A_fdr_sz	IF(NOT(A_fdr_prs=0), lookup(A_fdr_prs - (A_fdr_prs * A_max_sz_ca) in @feeder_cable_size)		
+# Max Size "A" Ca	A_max_sz_ca	TRUNC(IF(A_fdr_prs>#max_cop_fed, A_fdr_prs/#max_cop_fed,0))		
Distr Prs	distr_prs	(type1_HH/VLOOKUP(density,#dist0-#2550))/VLOOKUP(density, @cable_per_serving_table, 2)		
Distr Size	distr_sz	lookup((distr_prs - (#max_cop_distr* distr_max_sz),@distribution_cable_size)		
+# Max Size Ca	distr_max_sz	TRUNC(IF(distr_prs>#max_cop_distr, distr_prs/#max_cop_distr,0))		
# Fibers Rq'd	fib_req	SLC_fib + tot AFC_fib		
Fiber Cbl size	fib_cbl_sz	IF(fib_req=0,0,lookup(fib_req, @fiber_cable_size)		
B Sgmt \$	B_sgmt	max_ca_cost	Duplicate	
Sgmt \$/HH	sgmt_pHH	IF(cop_HH=0,0, B_sgmt/cop_HH)		
Cum CBG \$/HH	cum_CBG_pHH	cumulative_sum(sgmt_pHH) in BG_sqnc Order		
Alloc Cpr \$	alc_cop	IF(sgmt_t1="Cable", type1_HH*cum_CBG_pHH,0)		AR
# Fibers for BG	fib_bg	IF(sgmt_t1="SLC", SLCfiberremote,0)		
SLC B Sgmt \$	SLC_B_cost	SLC_B_sgmt		
Sgmt \$/Fiber	sgmt_cost_pfib	IF(SLC_fib=0, 0, SLC_B_sgmt/SLC_fib)		
Cum Sgmt \$/Fbr	cum_sgmt_pfib	cumulative_sum(sgmt_cost_pfib) in BG_sqnc Order		AW
Alloc SLC \$	alc_SLC	cum_sgmt_pfib * fib_bg		AX
AFC B Sgmt \$	AFC_B_cost	AFC_B_sgmt	No Referenece to this Var again	AY
Sgmt \$/HH	sgmt_cost_pHH	IF(AFC_HH=0,0,AFC_B_sgmt/AFC_HH)		AZ
Cum Sgmt \$/HH	cum_sgmt_pHH	cumulative_sum(sgmt_cost_pHH)		BC
Alloc AFC \$	alc_AFC	IF(sgmt_t1="AFC",type1_HH * cum_sgmt_pHH,0)		
Copper Based 'Size A	cop_A	if(a_dis<0, feeder_A)		
Size Last B	cop_B	cpr_fdr_size	Duplicate	
#Max Ca in B	max_ca_B	max_sz_ca	Duplicate	
Last B Cost	last_B	IF(cop_B=0,0,sgmt_dis*VLOOKUP(cop_B, density in @Feeder_cost_table))		
Max Ca Costs	max_ca_cost	sgmt_dis*max_ca_B*VLOOKUP(#max_cop_fed, density in @Feeder_cost_table)		
B Sgmt \$	cop_B_sgmt	last_B + max_ca_cost		
A Sgmt \$	cop_A_sgmt	IF(OR(feeder_A=0,cop_A=0),0,feeder_A*VLOOKUP(a_dis, density in @feeder_cost_table)		
BG \$ w/realloc	cop_bg_real	cop_A_sgmt + alc_cop		
Structure \$		Not Used		
Cpr BG \$		Not Used		

Data Dictionary -- CBG

Field Name	Variable Name	Formula	Business Description	Query Name
Fiber Based Size A	fib_A	IF(AND(NOT(a_dis=0),OR(sgmt_t1="AFC",sgmt_t1="SLC")),12,"N/A")		
A \$	c_fib_A	IF(fib_A="N/A",0,feeder_A* VLOOKUP(fib_A,density in @fiber_cost table))		
Size B	fib_B	fib_cbl_sz		
SLC B Sgmt \$	SLC_B_sgmt	IF(fib_req=0,0,sgmt_dis*(SLC_fib/fib_req)*VLOOKUP(fib_B,density in @Fiber_cost table))		
SLC A Sgmt \$	SLC_A_sgmt	IF(sgmt_t1="SLC",c_fib_A,0)		
BG \$ w/realloc	SLC_bg_real	SLC_A_sgmt + alc_SLC		
Electronics \$	SLC_ele	IF(sgmt_t1="SLC",#DLC_inv_pl_ad*t_line,0)		
AFC Based B Sgmt \$	AFC_B_sgmt	IF(fib_req=0,0,sgmt_dis*(AFC_fib/fib_req)* VLOOKUP(fib_B,density in @Fiber_cost table))		
A Sgmt \$	AFC_A_sgmt	IF(sgmt_t1="AFC",c_fib_A,0)		
BG \$ w/realloc	AFC_bg_real	AFC_A_sgmt + alc_AFC		
Structure \$	AFC_str	Not Used		
Electronics \$	AFC_ele	IF(sgmt_t1="AFC",#AFC_cost_pl_ad*t_line,0)		
Total AFC \$	t_AFC	Not Used		
Total Feeder Cost	t_feeder	Not Used		
Distr Base Cost	distr_base_cost	distr_dis * VLOOKUP(density in @cables per serving area table, 2)* (VLOOKUP(distr_sz, density in @Distribution_cost_table)+ distr_sz * VLOOKUP(#max_cop_distr,density in @Distribution_Cost_table))		
Distr Structure	distr_str_cost	Not Used		
Total Distr Cost	t_dis_cost	Not Used		
Ttl Loop Cost	t_loop_cost	Not Used		
Busy Hour Call Attempts	BHCA	Please see worksheet "Wire Center"		
CCS total Traffic	CCS_total	Please see worksheet "Wire Center"		
Total Lines Equipped	t_line_eq	Please see worksheet "Wire Center"		
Switches Required	swtch_req	Please see worksheet "Wire Center"		
Installed EO Switch per Line	EO_pl	Please see worksheet "Wire Center"		
wire center, per line	wc_pl	Please see worksheet "Wire Center"		
total local trunks required	t_lcl_trnk	Please see worksheet "Wire Center"		
local tdm trk invest per line	lcl_tdm_trnk_pl	Please see worksheet "Wire Center"		
local direct trunk investment per line	lcl_drt_trnk_pl	Please see worksheet "Wire Center"		
OS trks required	OS_trnk	Please see worksheet "Wire Center"		
OS trk invest per line	OS_trnk_pl	Please see worksheet "Wire Center"		
tdm, per line	tdm_pl	Please see worksheet "Wire Center"		
tandem wire center, per line	tdm_wc_pl	Please see worksheet "Wire Center"		
OS tdm, per line	OS_tdm_pl	Please see worksheet "Wire Center"		
OS tandem wire center, per line	OS_tdm_wc_pl	Please see worksheet "Wire Center"		
operator positions, per line	op_pos_pl	Please see worksheet "Wire Center"		
STP, per line	STP_pl	Please see worksheet "Wire Center"		
# links required	links	Please see worksheet "Wire Center"		
link investment per line	link_pl	Please see worksheet "Wire Center"		
SCP, per line	SCP_pl	Please see worksheet "Wire Center"		
total direct routed access trunks	drt_rt_ac_trnk	Please see worksheet "Wire Center"		

Data Dictionary -- CBG

Field Name	Variable Name	Formula	Business Description	Query Name
dedicated access trk inv, per line	ded_ac_trnk_pl	Please see worksheet "Wire Center"		
total switched access trunks	swtch_ac_trnk	Please see worksheet "Wire Center"		
switched access trk inv, per line	swtch_ac_trnk_pl	Please see worksheet "Wire Center"		
total intraLATA direct trunks	LATA_drt_trnk	Please see worksheet "Wire Center"		
intraLATA trk inv, per line (direct)	LATA_drt_pl	Please see worksheet "Wire Center"		
total intraLATA tandem trunks	LATA_tdm_trnk	Please see worksheet "Wire Center"		
intraLATA trk inv per line (tandem)	LATA_tdm_pl	Please see worksheet "Wire Center"		
total public telephone investment per line	pub_tel_pl	Please see worksheet "Wire Center"		
shared interoffice structure per line	shared_str_pl	Please see worksheet "Wire Center"		
density range	density_range	""Group the density variables into discrete ranges""		
sp1	sp1	t line * wc.shared_str_pl		
sp2	sp2	Not Used		
sp3	sp3	Not Used		
br fdr cbl	br_fdr_cbl	IF(cop_bg > 1, lookup(density in @copper_table, 3) * cop_bg * #cufeedarmormult, lookup(density in @fiber_table, 3) * ((SLC_bg_real + AFC_bg_real) + #fibfeedarmormult * (a_dis + b_dis)))		
br fdr plc	br_fdr_plc	IF(cop_bg > 1, lookup(density in @copper_table, 6) * lookup(density in @copper_table, 3) * (a_dis + b_dis), lookup(density in @fiber_table, 6) * lookup(density in @fiber_table, 3) * (a_dis + b_dis))	copper, otherwise fiber	
u/g fdr cbl	u/g_fdr_cbl	IF(cop_bg > 1, lookup(density in @copper_table, 4) * cop_bg, lookup(density in @fiber_table, 4) * (SLC_bg_real + AFC_bg_real))		
fdr cdt/man	fdr_cdt/man	see note		
fdr pole inv	fdr_pole_inv	IF(cop_bg > 1, ceiling(lookup(density in @copper_table, 2) * (a_dis + b_dis) / #cufeedpolespace, 1) * #cufeedpoleinv, ceiling(lookup(density in @fiber_table, 2) * (a_dis + b_dis) / #cufeedpolespace, 1) * #cufeedpoleinv)		
aer fdr cbl	aer_fdr_cbl	IF(cop_bg > 1, lookup(density in @copper_table, 2) * cop_bg, lookup(density in @fiber_table, 2) * (SLC_bg_real + AFC_bg_real))		
u/g dst cbl	u/g_dst_cbl	lookup(density in @distr_table, 4) * distr_base_cost		
aer dst cbl	aer_dst_cbl	lookup(density in @distr_table, 2) * distr_base_cost		
dst pole inv	dst_pole_inv	ceiling(lookup(density in @distr_table, 2) * lookup(density in @cable_per_serving_area, 2) * distr_dis / #dispolespace, 1) * #dispoleinv)		
dst cdt	dst_cdt	lookup(density in @distr_table, 2) * lookup(density in @cable_per_serving_area, 2) * distr_dis * (lookup(density in @distr_table, 7) + #distcondinv))		
sp4	sp4	Not Used		
sp5	sp5	Not Used		
sp6	sp6	Not Used		
br dst cbl	br_dst_cbl	lookup(density in @distr_table, 3) * distr_base_cost * #distarmormult		
br dst plc	br_dst_plc	lookup(density in @distr_table, 3) * lookup(density in @cable_per_serving_area, 2) * distr_dis * lookup(density in @distr_table, 6)		

Data Dictionary -- CBG

Field Name	Variable Name	Formula	Business Description	Query Name
NID + terminal and splice	NID_trm_spc	(#NIDInv + #SpliceInv) * (tothh + bus_line / #BusLinesLoc)		
passive SAI	pss_SAI	IF(cop_bg <> 0, lookup(t_line/(lookup(density in @distrubation_fill_table, 2) in @SAI_Inv_Table, 2))		
electronics	elect	IF(AFC_ele + SLC_ele > 1, 0, IF(SLC_ele < 1, ceiling((t_line/#SLCfill)/#SLCMaxlines, 1) * (SLChouse + SLComm) + t_line * SLCchan, ceiling((t_line/#AFCfill)/#AFCMaxlines, 1) * (AFChouse + AFCcomm) + t_line * AFCchan)		
optical "SAI"	opt_SAI	IF(cop_bg <> 0, lookup(t_line/(lookup(density in @distrubation_fill_table, 2) in @SAI_Inv_Table, 3))		
equipped lines in wire center	line_wc	wc.t_line_eq		
EO switching, installed	EO	t_line * wc.EO_pl		
EO wire center investment	EO_WC_inv	t_line * wc.wc_pl		
dedicated transport	ded_tspt	t_line * wc.t_ded_trnspt_pl		
common transport	cmn_tspt	t_line * wc.t_cmn_trnspt_pl		
fdr dist	fdr_dist	a_dis + b_dis		
dst dist	N/A	Same as distr_dis		
fdr structure	fdr_strctr	SLC_str + AFC_str + cop_str		
dst structure	dst_strctr	distr_str_cost		
OS tdm investment	OS_tdm_inv	t_line * wc.OS_tdm_pl		
total structure	tot_strctr	distr_str_cost + SLC_str + AFC_str + cop_str		
OS trk inv	OS_trnk_inv	t_line * wc.OS_trnk_pl		
OS wc inv	OS_wc_inv	t_line * wc.OS_tdm_wc_pl		
OS pstn inv	OS_pstn_inv	t_line * wc.op_pos_pl		
tdm inv	tdm_inv	t_line * wc.tdm_pl		
tdm wc inv	tdm_wc_inv	t_line * wc.tdm_wc_pl		
STP investment	STP	t_line * wc.STP_pl		
SCP investment	SCP	t_line * wc.SCP_pl		
link investment	link	t_line * wc.link_pl		
pub tel inv	pub_tel	t_line * wc.pub_tel_pl		
loc dr trk inv	lcl_dr_trk	(res_line + bus_line + pub_line) * wc.lcl_drt_trnk_pl		
DLC lines	DLC	if(t_AFC + t_SLC > 1, t_line)		
loc tdm trk inv	lcl_tdm	(res_line + bus_line + pub_line) * wc.lcl_tdm_trnk_pl		

2.3 Wire Center Level Data

Each Wire Center contains multiple CBGs. This data includes input values stored in the database related to each Wire Center that cannot be changed by the user. Each Wire Center variable will have a value for each individual Wire Center. The Wire Center data also includes derived calculations which use both Wire Center input variables and the Model Attributes. The Wire Center Data is used by the Wire Center Module and the Convergence Module.

Data Dictionary -- Wire Center

Field Name	Variable Name	Formula	Excel Address
wire center	cli	Input from the BCM Line Converter Module	Wire Center Inv Per Line:A
total lines	t_line_wc	...	
bus lines	bus_line_wc	...	
Special Access Lines	sa_line_wc		
res lines	res_line_wc	...	
public telephone lines	pub_line_wc	...	
STP A link distance sum	a_dist_sum	Input from the State Input Database	Input Distances:B
local tandem distance	lcl_tdm_dist	...	Input Distances:C
Busy Hour Call Attempts	BHCA	bus_line_wc * #BHCAB + res_line_wc * #BHCAR	Wire Center Inv Per Line:A
CCS total Traffic	CCS_total	bus_line_wc * #CCS_bus + res_line_wc * #CCS_res	
Total Lines Equipped	t_line_eq	Pub_line_wc + bus_line_wc + res_line_wc	
Switches Required	swtch_req	IF(C2 <> 0, max(ceiling(t_line_eq / #max_lineFill) / #MaxLines, 1), ceiling((BCHA * #FeatureMult / #MaxProc) / lookup(t_line_eq, #BHCA1-#4), 1), ceiling(CCS_total / lookup(t_line_eq, #BHCCS1-#4), 1)))	
Installed EO Switch per Line	EO_pl	(see note)	
wire center, per line	wc_pl	if(C2 <> 0, 1 / t_line_req * (lookup(t_line_re, #pf1-#pf5) + lookup(t_line_eq / swtch_req, #room1-#room5) * (swtch_req * lookup(t_line_eq / swtch_req, #const1-#5) + #lot_size * lookup(t_line_eq, #land1-5))))	
total local trunks required	t_lcl_trnk	ceiling(((bus_line_wc + pub_line_wc) * #Int_Ofc_fr * #CCS_bus + res_line_wc * #Int_Ofc_fr * #CCS_res) / #trunkCCS, 1)	
local tdm trk invest per line	lcl_tdm_trnk_pl	if(t_line_req <> 0, (1 - #DirectFrac) * t_lcl_trnk / t_line_eq * IF(lcl_tdm_dist = 0, #t_tm_cs_pDS + .1 * #t_wm_cs_pDS, (#t_tm_cs_pDS + lcl_tdm_dist * #t_wm_cs_pDS)))	
local direct trunk investment per line	lcl_drt_trnk_pl	if(t_line_req <> 0, t_lcl_trnk * #DirectFrac / t_line_eq * (#1_tm_cs_pDS + #Miles * #1_wm_cs_pDS))	
OS trks required	OS_trnk	ceiling(((bus_line_wc + pub_line_wc) * #bus_OS + res_line_wc * #res_OS) / #trunkCCS, 1)	
OS trk invest per line	OS_trnk_pl	if(t_line_eq <> 0, IF(lcl_tdm_dist = 0, OS_trnk / t_line_eq * #t_tm_cs_pDS + 0.1 * #t_wm_cs_pDS, OS_trnk / t_line_eq * #t_tm_cs_pDS + lcl_tdm_dist * #t_wm_cs_pDS))	

Data Dictionary -- Wire Center

Field Name	Variable Name	Formula	Excel Address
tdm, per line	tdm_pl	if(t_line_eq > 0, (#pl_swch_cm_n_eq + #Term_inv * (t_lcl_trnk * (1 - #DirectFrac) + swch_ac_trnk + LATA_tdm_trnk) / t_line_eq) * #InstallMult)	
tandem wire center, per line	tdm_wc_pl	#wc_inv_pl	
OS tdm, per line	OS_tdm_pl	if(t_line_eq > 0, (#t_OS_tdm_pl + #TermInv * OS_trnk / t_line_e))	
OS tandem wire center, per line	OS_tdm_wc_pl	#t_OS_tdm_wc_pl	
operator positions, per line	op_pos_pl	#t_op_pos_pl	
STP, per line	STP_pl	if(t_line_eq > 0, (#inv_pl + links * (#LinkTerm/2) / t_line_eq))	
# links required	links	2 * ceiling(((bus_line_wc + pub_line_wc) * BHCAB + res_line_wc * #BHCAR) * pBHCA_load_f, 1)	
link investment per line	link_pl	if(t_line_eq > 0, links / (2 * t_line_eq) * (2 * #t_tm_cs_pDS + A_dis_sum * #t_wm_cs_pDS) + #tdm_A_psl + #C_psl)	
SCP, per line	SCP_pl	#t_SCP_pl	
total direct routed access trunks	drt_rt_ac_trnk	ceiling(((bus_line_wc + pub_line_wc) * #bus_inter_drt + res_line_wc * #res_inter_drt) / #TrunkCCS + sa_line_wc, 1) + swch_ac_trnk)	
dedicated access trk inv, per line	ded_ac_trnk_pl	if(t_line_eq > 0, (drt_rt_ac_trnk - swch_ac_trnk) / t_line_eq * (#a_tm_cs_pDS + #Accessdist * #a_wm_cs_pDS) + swch_ac_trnk / t_line_eq * #a_tm_cs_pDS)	
total switched access trunks	swch_ac_trnk	ceiling(((bus_line_wc + pub_line_wc) * #bus_inter_tdm + res_line_wc * #res_inter_tdm) / #TrunkCCS, 1)	
switched access trk inv, per line	swch_ac_trnk_pl	if(t_line_eq > 0, IF(lcl_tdm_dis = 0, swch_ac_trnk / t_line_eq * (#t_tm_cs_pDS + 0.1 * #t_wm_cs_pDS), swch_ac_trnk / t_line_eq * (#t_tm_cs_pDS + lcl_tdm_dist * #t_wm_cs_pDS)))	
total intraLATA direct trunks	LATA_drt_trnk	ceiling(((bus_line_wc + pub_line_wc) * #bus_intra_drt + res_line_wc * #res_intra_drt) / #TrunkCCS, 1)	
intraLATA trk inv, per line (direct)	LATA_drt_pl	if(t_line_eq > 0, LATA_drt_trnk / t_line_eq * (#I_tm_cs_pDS + #I_wm_cs_pDS * #LATAdist))	
total intraLATA tandem trunks	LATA_tdm_trnk	ceiling(((bus_line_wc + pub_line_wc) * #bus_intra_tdm + res_line_wc * #res_intra_tdm) / #TrunkCCS, 1)	
intraLATA trk inv per line (tandem)	LATA_tdm_pl	if(t_line_eq > 0, IF(lcl_tdm_dis = 0, LATA_tdm_trnk / t_line_eq * #i_tm_cs_pDS + 0.1 * #i_wm_cs_pDS, LATA_tdm_trnk / t_line_eq * #i_tm_cs_pDS + lcl_tdm_dist * #i_wm_cs_pDS))	
total public telephone investment per line	pub_tel_pl	if(t_line_eq > 0, pub_line_wc * #PubInv / t_line_eq)	
shared interoffice structure per line	shared_str_pl	see Note	

Data Dictionary -- Wire Center

Field Name	Variable Name	Formula	Excel Address
total dedicated transport per line	t_ded_trnspt_pl	LATA_drt_pl + ded_ac_trnk_pl + lcl_drt_trnk_pl	
total common transport per line	t_cmn_trnspt_pl	LATA_tdm_pl + swtch_ac_trnk_pl + lcl_tdm_trnk_pl	

2.4 Miscellaneous Tables

The miscellaneous tables included here contain data identical to information stored in the tables above. These tables were created to facilitate programming and to improve the readability of this data dictionary.

Data Dictionary -- Misc Tables

Row #	Plant Type	Urban/Rural	Density	Category	Surface	Weighted Cost Factor
1	Distribution	Urban	>2550	RockH		1.4208
2				RockS		1.088
3				Normal		1.0176
4	Distribution	Urban	850-255	RockH		1.194
5				RockS		0.924
6				Normal		0.858
7	Distribution	Rural	650-850	RockH		0.709
8				RockS		0.4165
9				Normal		0.2905
10	Distribution	Rural	200-650	RockH		0.702
11				RockS		0.407
12				Normal		0.279
13	Distribution	Rural	5-200	RockH		0.688
14				RockS		0.388
15				Normal		0.256
16	Distribution	Rural	0-5	RockH		0.674
17				RockS		0.369
18				Normal		0.233
19	Feeder	Urban	>2550	RockH		1.9584
20				RockS		1.5616
21				Normal		1.4208
22	Feeder	Urban	850-255	RockH		1.446
23				RockS		1.146
24				Normal		1.047
25	Feeder	Rural	650-850	RockH		0.688
26				RockS		0.388
27				Normal		0.256
28	Feeder	Rural	200-650	RockH		0.702
29				RockS		0.407
30				Normal		0.279
31	Feeder	Rural	5-200	RockH		0.709
32				RockS		0.4165
33				Normal		0.2905
34	Feeder	Rural	0-5	RockH		0.716
35				RockS		0.426
36				Normal		0.302
37	Fiber	Urban	>2550	RockH		11.5456
38				RockS		9.2416
39				Normal		8.3968
40	Fiber	Urban	850-255	RockH		8.468
41				RockS		6.748
42				Normal		6.154
43	Fiber	Rural	650-850	RockH		3.25
44				RockS		1.74
45				Normal		1.276
46	Fiber	Rural	200-650	RockH		3.375
47				RockS		1.885
48				Normal		1.404

Distribution structure inputs						
Density range limit	aerial fraction	buried fraction	underground fraction	buried installation/foot	conduit installation/foot	
0 - 5	0.50	0.50	-	\$ 2.00	2.00	\$ 25.00
5 - 200	0.50	0.50	-	\$ 2.00	2.00	\$ 25.00
200 - 650	0.50	0.50	-	\$ 2.00	2.00	\$ 25.00
650 - 850	0.50	0.50	-	\$ 3.00	3.00	\$ 25.00
850 - 2550	0.40	0.50	0.10	\$ 3.00	3.00	\$ 45.00
> 2550	0.65	0.05	0.30	\$ 20.00	20.00	\$ 70.00

pole spacing, feet 150
 pole investment \$ 450
 conduit investment per foot \$ 1.00 w/o trenching
 manhole investment, per manho \$ 3,000
 buried cable armoring multiplier 1.10

Feeder structure inputs						
Copper						
Density range limit	aerial fraction	buried fraction	underground fraction	manhole spacing	buried installation/foot	conduit installation/foot
0 - 5	0.50	0.45	0.05	800	\$ 2.00	\$ 25.00
5 - 200	0.50	0.45	0.05	800	\$ 2.00	\$ 25.00
200 - 650	0.50	0.45	0.05	800	\$ 2.00	\$ 25.00
650 - 850	0.40	0.40	0.20	800	\$ 3.00	\$ 25.00
850 - 2550	0.10	0.10	0.80	600	\$ 3.00	\$ 45.00
> 2550	0.05	0.05	0.90	400	\$ 25.00	\$ 75.00

pole spacing, feet 150
 pole investment \$ 450
 conduit investment per foot \$ 1.00 w/o trenching
 manhole investment, per manho \$ 3,000
 buried cable armoring multiplier 1.10

Structure fraction shared with interoffice facilities 0.25 Paul Note: not used

Fiber						
Density range limit	aerial fraction	buried fraction	underground fraction	manhole spacing	buried installation/foot	conduit installation/foot
0 - 5	0.35	0.60	0.05	2000	\$ 2.00	\$ 25.00
5 - 200	0.35	0.60	0.05	2000	\$ 2.00	\$ 25.00
200 - 650	0.35	0.60	0.05	2000	\$ 2.00	\$ 25.00
650 - 850	0.20	0.60	0.20	2000	\$ 3.00	\$ 25.00
850 - 2550	0.10	0.10	0.80	2000	\$ 3.00	\$ 45.00
> 2550	0.05	0.05	0.90	2000	\$ 20.00	\$ 70.00

Buried cable armoring per foot, \$ 0.20

Data Dictionary -- Misc Tables

49	Fiber	Rural	5-200	RockH	3.4375
50				RockS	1.9575
51				Normal	1.468
52	Fiber	Rural	0-5	RockH	3.5
53				RockS	2.03
54				Normal	1.532

Texture Table	
Texture	Impact
	0
BY	1
BY-SICL	1
BYV	1
BYV-FSL	1
BYV-L	1
BYV-LS	1
BYV-SIL	1
BYV-SL	1
BYX	1
BYX-L	1
BYX-SIL	1
C	0
CB	0
CBA	1
CB-C	0
CB-CL	0
CB-COSL	0
CB-L	0
CB-LS	0
CB-S	0
CB-SIL	0
CB-SL	1
CBV	1
CBV-C	1
CBV-CL	1
CBV-L	1
CBV-SIL	1
CBV-SL	1
CBX	1
CE	0
CIND	0
CL	0
CM	1
CN	0
CN-FSL	0
CN-L	0
CN-SIL	0
CN-SL	0
CNV	0
CNV-L	0
CNV-SIL	0
CNV-SL	0
CNX	0
CNX-SL	0
COS	0

switch real-time limit, BHCA	
lines	limit
1	10000
1000	50000
10000	200000
40000	600000

Traffic and cost inputs b16-c19

Density ranges Table	
	0 - 5
	5 - 200
200	200 - 650
650	650 - 850
850	850 - 2550
2550	> 2550

cables per serving area table	
0	2
5	4
200	4
650	4
850	6
2550	8

Distribution fill Table	
density	
0	0.5
5	0.55
200	0.6
650	0.65
850	0.7
2550	0.75

Conv. Calculation BL33-BM39

SAI Inv. Table		
	SAI investment (installed)	
Distribution ca	copper feeder	fiber feeder
0	500	2500
100	700	2700
200	900	2900
400	1100	3100
600	1300	3300
900	1500	3500
1200	1700	3700
1800	1900	3900
2400	2100	4100
3000	2300	4300
3600	2500	4500

Conv. Calculation BH29 - BJ43

Digital loop carrier inputs	
BCM "SLC" (TR-303)	
site, housing, and power per R	\$ 3,000
maximum lines	672
RT fill factor	0.90
common equipment investmen	\$ 42,000
channel unit investment per lin	\$ 75
BCM "AFC"	
site, housing, and power per R	\$ 2,500
maximum lines	100
RT fill factor	0.90
common equipment investmen	\$ 10,000
channel unit investment per lin	\$ 150

Data Dictionary – Misc Tables

Texture	Impact
COSL	0
CR	0
CRC	1
CR-L	1
CR-SIL	1
CRV	1
CRV-L	1
CRX	1
DE	0
FB	0
FL	0
FL-L	0
FL-SICL	0
FL-SIL	0
FLV	1
FLX	1
FLX-L	1
FRAG	0
FS	0
FSL	0
G	0
GR	0
GRC	0
GR-C	0
GR-CL	0
GR-COS	0
GR-COSL	0
GRF	0
GR-FS	0
GR-FSL	0
GR-L	0
GR-LCOS	0
GR-LFS	0
GR-LS	0
GR-S	0
GR-SCL	0
GR-SIC	0
GR-SIL	0
GR-SL	0
GRV	1
GRV-CL	1
GRV-COS	1
GRV-COSL	1
GRV-FSL	1
GRV-L	1
GRV-LCOS	1
GRV-LS	1
GRV-S	1
GRV-SCL	1
GRV-SIL	1
GRV-SL	1
GRX	1
GRX-COS	1
GRX-L	1
GRX-S	1
GRX-SL	1
GYP	1
HM	0

Data Dictionary – Misc Tables

Texture	Impact
ICE	1
IND	1
L	0
LCOS	0
LFS	0
LS	0
LVFS	0
MARL	0
MK	0
MK-C	0
MK-CL	0
MK-FSL	0
MK-L	0
MK-SIL	0
MK-VFSL	0
MPT	0
MUCK	0
PEAT	0
PT	0
RB	1
S	0
SC	0
SCL	0
SG	0
SH	0
SH-CL	0
SH-L	0
SH-SICL	0
SH-SIL	0
SHV	1
SHV-CL	1
SHX	1
SI	0
SIC	0
SICL	0
SIL	0
SL	0
SP	0
SR	0
ST	0
ST-C	0
ST-CL	0
ST-COSL	0
ST-FSL	0
ST-L	0
ST-LCOS	0
ST-LFS	0
ST-LS	0
ST-SIL	0
ST-SL	0
STV	1
STV-CL	1
STV-FSL	1
STV-L	1
STV-MUCK	1
STV-SICL	1
STV-SIL	1
STV-SL	1
STX	1

Data Dictionary -- Misc Tables

Texture	Impact
STX-C	1
STX-CL	1
STX-L	1
STX-LCOS	1
STX-SIL	1
STX-SL	1
SY	1
SY-SIL	1
SYV	1
SYX	1
UNK	0
UWB	1
VAR	0
VFS	0
VFSL	0
WB	1

Data Dictionary -- Loop Table

Density/Fill Table			
Density	Feeder	Distribution	
0	0.65	0.5	4
5	0.75	0.55	5
200	0.8	0.6	6
650	0.8	0.65	7
850	0.8	0.7	8
2550	0.8	0.75	9

Loop-- Main Logic --AK71 - AN76

Density/Fill Table

Density	Feeder	Distribution	
0	0.65	0.5	4
5	0.75	0.55	5
200	0.8	0.6	6
650	0.8	0.65	7
850	0.8	0.7	8
2550	0.8	0.75	9

Distribution	Feeder	Fiber Cable Size Table
Cable Size	Cable Size	Cable Size
3600	4200	216
3000	3600	144
2400	3000	96
1800	2400	72
1200	1800	60
900	1200	48
600	900	36
400	600	24
200	400	18
100	200	12
50	100	
25	Loop-- S64-s74	
Loop-- Input	w64-w74	loop input

Fiber Feeder UG/Aerial Mix Table		
Density	UG%	Aerial%
0-5	60	40
5-200	65	35
200-650	70	30
650-850	80	20
850-2550	90	10
>2550	100	0

Fiber cable cost factor= 1

Copper Cable Cost factor= 1

Copper Feeder UG/Aerial Mix Table		
Density	UG%	Aerial%
0-5	60	40
5-200	65	35
200-650	70	30
650-850	80	20
850-2550	90	10
>2550	100	0

SLC Discounted \$/Access Line= 400

AFC Discounted \$/Access Line= 495

COE Switch Discounted \$/Access = 0

COE Switch \$/Minute= 9000

Distribution UG/Aerial Mix Table		
Density	UG%	Aerial%
0-5	90	10
5-200	80	20
200-650	70	30
650-850	65	35
850-2550	60	40
>2550	50	50